

CLAIMS

1. A method of preparing a material exhibiting photocatalytic properties comprising at least partially
5 crystallized titanium oxide, especially in anatase form, characterized in that it employs temperatures in excess of 600°C.
2. The method as claimed in claim 1, characterized in
10 that it employs temperatures in excess of 630°C.
3. The method as claimed in claim 1 or 2, characterized in that it entails a toughening and/or bending treatment carried out on glazing.
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4. The method as claimed in one of the preceding claims, characterized in that it comprises the deposition of a titanium oxide coating on a first face of a first transparent or semitransparent substrate of
20 the glass or glass-ceramic type which, optionally, has been provided beforehand with one or more functional multilayers and/or functional layers.
5. The method as claimed in claim 4, characterized in
25 that it comprises the deposition, on the second face of said first transparent or semitransparent substrate or on a second face belonging to a second transparent or semitransparent substrate, of one or more functional multilayers and/or functional layers.
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6. The method as claimed in claim 5, characterized in that said employment of temperatures in excess of 600°C is after the deposition on said first and second faces.
- 35 7. The method as claimed in claim 5 or 6, characterized in that the deposition on said first and second faces is carried out by cathode sputtering.

8. The method as claimed in claim 7, characterized in that the deposition on the first and second faces is carried out in line simultaneously or almost simultaneously along substantially identical directions and in opposite senses.

9. A glass sheet, at least one face of which bears a coating of a material comprising titanium oxide, characterized in that it is capable of undergoing or has undergone a heat treatment at above 600°C, such as a toughening and/or bending operation, while still preserving the photocatalytic activity and the optical quality that are required for antisoiling glazing.

10. The glass sheet as claimed in claim 9, characterized in that the mean colorimetric variation ΔE in reflection on the coating side induced by the heat treatment at above 600°C is at most 2.8, preferably at most 2.3.

11. Single or multiple, laminated, monolithic glazing, which includes a glass sheet as claimed in claim 9 or 10.

12. Single or multiple, laminated, monolithic glazing, at least a first face of at least a first constituent glass sheet of which bears a coating of a material exhibiting photocatalytic properties, obtained in accordance with the method of claim 1.

13. The glazing as claimed in claim 12, characterized in that, beneath the coating of a material exhibiting photocatalytic properties, said first face bears one or more functional multilayers and/or functional layers, including at least one layer forming a barrier to the migration of alkali metals from the glass liable to result from the application of temperatures in excess of 600°C.

14. The glazing as claimed in claim 12 or 13, characterized in that the second face of said first glass sheet or a second face belonging to a second constituent glass sheet bears one or more functional
5 multilayers and/or functional layers chosen from a thermal control, such as solar-control, or low-emissivity multilayer, a multilayer or a layer with an optical functionality, such as antireflection, light radiation filtration, coloration or scattering, a layer
10 of an antisoiling photocatalytic material especially of the type with high activity, a hydrophilic layer, a hydrophobic layer, a network of conductive threads or a conductive layer especially for heating, or an antenna or antistatic layer, these being taken individually or
15 in combination.

15. The application of glazing as claimed in one of claims 11 to 14 as "self-cleaning", especially antifogging, anticondensation and antisoiling glazing,
20 especially architectural glazing of the double-glazing type, vehicle glazing of the windshield, rear window, side window and wing mirror type for automobiles, windows for trains, aircraft and ships, utilitarian glazing, such as aquarium glass, shop window glass and
25 greenhouse glass, interior furnishings, urban furniture, mirrors, screens for display systems of the computer, television and telephone type, electrically controllable glazing, such as electrochromic glazing of the liquid-crystal or electroluminescent type, or
30 photovoltaic glazing.